

## **REMARKS AND RESPONSE TO OFFICIAL ACTION**

### **I. Claims in the Case**

Claims 87-88 have been amended. Claims 3, 4, 20, 21, 23-29, 36-76 and 85-89 are pending.

The amendments to claims 87-88 are not believed to introduce new issues or additional considerations as these amendments are believed to be consistent with language already considered and found acceptable with respect to claim 20. Claim 20 specifies that the first and second primers, respectively, have regions complementary to distinct first and second linker sequences. Claims 87-88 have been amended to incorporate this feature.

### **II. Rejection of Claims 87-89 Under Section 102(a)/103 over Silver and Senapathy**

The Action takes the position that the subject matter of claims 87-89 are anticipated or obvious over the Silver *et al.* '792 ("Silver") and/or the Senapathy '058 patents, and argues that the language of the claims, "that is prepared to incorporate a sequence that anneals to a predetermined linker sequence," is merely an intended use and thus must be disregarded. The Action further refers to col. 3, lines 55-57 of Silver and argues that the sequence 5'-GACTCNNNN-3' will, if provided a linker sequence of 5'-XXXXGAGTC-3', anneal thereto. Notably, the Action fails to direct us to a teaching of such a linker sequence.

In response, Applicants would first note that the claims are directed to primers having a 3' random specificity region and a 5' region that incorporate a sequence "that anneals to a predetermined linker sequence." However, those primers of Silver that contain random specificity regions are shown *not* to have 5' regions that bind their template. For example, the Silver patent clearly discloses in Figure 1 that the region of *its* primers that is located 5' of the random sequence *does not* bind to the template. It is not until the Silver prepares a primer that does *not* incorporate a random sequence that it teaches the use of a known sequence that binds to

the template. See, for example, bottom of Figure 1 as compared to the first two depictions at the top of Figure 1.

The Action's reference to col. 3, lines 55-57 of Silver, and its argument that the sequence 5'-GACTCNNNN-3' will, if provided a linker sequence of 5'-XXXXGAGTC-3', anneal thereto, is already commented upon above. This argument is unavailing as the Action fails to direct us to a teaching or suggestion of a linker that incorporate such a sequence. On the contrary, Silver teaches against such an embodiment since, as explained in the foregoing paragraph, the 5' regions of its primers that have random sequences at their 3' end do not bind to the template – only those primers that do not have random 3' sequence bind to the template.

Turning to Senapathy, this patent appears to disclose in Figures 1 through 3, the concept of "genome walking with a known first primer and a partly fixed second primer." Similarly, Figure 4 refers to the use of the "same set of partly fixed second primers" all working from a known primer which does not appear to have "unfixed" regions. Thus, these embodiments appear to be distinct from the invention of claim 87-89 which require that both members of the primer pairs incorporate random sequences in their specificity regions. If the Examiner is aware of any teaching in Senapathy that discloses primer pairs wherein both members of the pair incorporate random sequences in their specificity region, the Examiner is requested to make this of record as it will be relevant should and appeal be necessary.

Lastly, with respect to the Examiner's contention that the claim language "that incorporates a sequence that anneals to a predetermined linker sequence" is merely an intended use limitation, Applicants again point out that this language presents a positive structural feature and simply cannot be said to be an intended use – it uses the language "that incorporates," it does *not* merely say "that may be used to bind" or "may be capable of binding" some other such

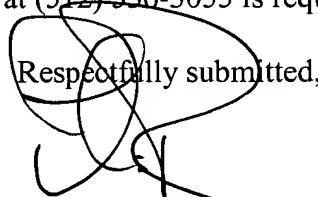
variation. To anticipate such "that incorporates" language, the Examiner must demonstrate prior art that actually shows a primer that incorporates a sequence that binds to a linker. This has not been done. Indeed, the Action relies upon the 5'-GACTCNNNN-3' of Silver, but admittedly fails to demonstrate that the complement of such sequence is found in any known linker. Even if it is the case that the claim element (a) recites an intended use, it *also* recites a positive structural feature that must be taken into account.

In any event, the claims now refer to a primer pair, wherein each member of the pair incorporates a sequence that binds to a *different* linker sequence, and are thus still further removed from the prior art.

For the foregoing reasons, the Examiner is requested to reconsider and withdraw the pending rejections against claims 87-89 and pass the case to allowance.

**V. Conclusion**

It is submitted that the present response is a complete response to the outstanding official action, and that the claims are in condition for allowance. If the Examiner has any questions or comments, a telephone call to the undersigned at (512) 536-3055 is requested.



Respectfully submitted,

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